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<110> Boehringer Ingelheim International GmbH

<120> Tumor-associated Antigen R11

<130> 12211aa

<140> US 09/631,863

<141> 2000-08-03

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<170> PatentIn version 2.1

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Met Arg Asn Lys Arg Val

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5

ttg aaa aca aaa aaa aga agg agt gga aga ggg ggc cag gat cca ggc 283

Leu Lys Thr Lys Lys Arg Arg Ser Gly Arg Gly Gly Gln Asp Pro Gly

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15

20

ctc cat ccc cac aga agt gaa gct aca gct ggg agg tct cct ccc acc 331

Leu His Pro His Arg Ser Glu Ala Thr Ala Gly Arg Ser Pro Pro Thr

09631863-062901

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 35 40 45

Pro Pro Pro Pro Pro Pro Pro Pro Asn Asn Asn Asn Asn Asn Ser
 50 55 60

Lys His Thr Gly His Lys Ser Ala Cys Val Pro Asn Met Thr Glu Arg
 65 70 75 80

Arg Arg Asp Glu Leu Ser Glu Glu Ile Asn Asn Leu Arg Glu Lys Val
85 90 95

Met Lys Gln Ser Glu Glu Asn Asn Asn Leu Gln Ser Gln Val Gln Lys
100 105 110

Leu Thr Glu Glu Asn Thr Thr Leu Arg Glu Gln Val Glu Pro Thr Pro
115 120 125

Glu Asp Glu Asp Asp Asp Ile Glu Leu Arg Gly Ala Ala Ala Ala Ala
130 135 140

Ala Pro Pro Pro Pro Ile Glu Glu Glu Cys Pro Glu Asp Leu Pro Glu
145 150 155 160

Lys Phe Asp Gly Asn Pro Asp Met Leu Ala Pro Phe Met Ala Gln Cys
165 170 175

Gln Ile Phe Met Glu Lys Ser Thr Arg Asp Phe Ser Val Asp Arg Val
180 185 190

Arg Val Cys Phe Val Thr Ser Met Met Thr Gly Arg Ala Ala Arg Trp
195 200 205

Ala Ser Ala Lys Leu Glu Arg Ser His Tyr Leu Met His Asn Tyr Pro
210 215 220

Ala Phe Met Met Glu Met Lys His Val Phe Glu Asp Pro Gln Arg Arg
225 230 235 240

Glu Val Ala Lys Arg Lys Ile Arg Arg Leu Arg Gln Gly Met Gly Ser
245 250 255

Val Ile Asp Tyr Ser Asn Ala Phe Gln Met Ile Ala Gln Asp Leu Asp
260 265 270

Trp Asn Glu Pro Ala Leu Ile Asp Gln Tyr His Glu Gly Leu Ser Asp
275 280 285

His Ile Gln Glu Glu Leu Ser His Leu Glu Val Ala Lys Ser Leu Ser
290 295 300

Ala Leu Ile Gly Gln Cys Ile His Ile Glu Arg Arg Leu Ala Arg Ala

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Ala Ala Ala Arg Lys Pro Arg Ser Pro Pro Arg Ala Leu Val Leu Pro
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His Ile Ala Ser His His Gln Val Asp Pro Thr Glu Pro Val Gly Gly
340 345 350

Ala Arg Met Arg Leu Thr Gln Glu Glu Lys Glu Arg Arg Arg Lys Leu
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Asn Leu Cys Leu Tyr Cys Gly Thr Gly Gly His Tyr Ala Asp Asn Cys
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Pro Ala Lys Ala Ser Lys Ser Ser Pro Ala Gly Asn Ser Pro Ala Pro
385 390 395 400

Leu

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<213> Homo sapiens

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35 40 45

Glu Ala Ile Asp Gly Arg Pro Ile Ala Ser Gly Pro Val Val His Glu
50 55 60

Thr His Asp Leu Ile Val Asp Leu Gly Asp His Arg Glu Val Leu Ser
65 70 75 80

Phe Asp Val Thr Gln Ser Pro Phe Phe Pro Val Val Leu Gly Val Arg
85 90 95

T06290"E98TE960

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Pro	Val	Asp	Gly	Tyr	Arg	Val	Tyr	Gln	Pro	Val	Arg	Tyr	Tyr	Tyr	Val	145	150	155
Gln	Asn	Val	Tyr	Thr	Pro	Val	Asp	Glu	His	Val	Tyr	Pro	Asp	His	Arg	165	170	175
Leu	Val	Asp	Pro	His	Ile	Glu	Met	Ile	Pro	Gly	Ala	His	Ser	Ile	Pro	180	185	190
Ser	Gly	His	Val	Tyr	Ser	Leu	Ser	Glu	Pro	Glu	Met	Ala	Ala	Leu	Arg	195	200	205
Asp	Phe	Val	Ala	Arg	Asn	Val	Lys	Asp	Gly	Leu	Ile	Thr	Pro	Thr	Ile	210	215	220
Ala	Pro	Asn	Gly	Ala	Gln	Val	Leu	Gln	Val	Lys	Arg	Gly	Trp	Lys	Leu	225	230	235
Gln	Val	Ser	Tyr	Asp	Cys	Arg	Ala	Pro	Asn	Asn	Phe	Thr	Ile	Gln	Asn	245	250	255
Gln	Tyr	Pro	Arg	Leu	Ser	Ile	Pro	Asn	Leu	Glu	Asp	Gln	Ala	His	Leu	260	265	270
Ala	Thr	Tyr	Thr	Glu	Phe	Val	Pro	Gln	Ile	Pro	Gly	Tyr	Gln	Thr	Tyr	275	280	285
Pro	Thr	Tyr	Ala	Ala	Tyr	Pro	Thr	Tyr	Pro	Val	Gly	Phe	Ala	Trp	Tyr	290	295	300
Pro	Val	Gly	Arg	Asp	Gly	Gln	Gly	Arg	Ser	Leu	Tyr	Val	Pro	Val	Met	305	310	315
Ile	Thr	Trp	Asn	Pro	His	Trp	Tyr	Arg	Gln	Pro	Pro	Val	Pro	Gln	Tyr	325	330	335

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 <223> Description of the Synthetic Sequence: Primer

<400> 5
 agcttcacgt ggctgcagat gccatggtgg 30

<210> 6
 <211> 30
 <212> DNA
 <213> Synthetic Sequence

<220>
 <223> Description of the Synthetic Sequence: Primer

<400> 6
 ctagcccacc atggcatctg cagcacgtga 30

<210> 7
 <211> 29
 <212> DNA
 <213> Synthetic Sequence

<220>
 <223> Description of the Synthetic Sequence: Primer

<400> 7
 agcttcacgt ggtgcagatg ccatggtgg 29

00631863-06901
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<210> 8
<211> 29
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 8
ctagcccacc atggcatctg cacacgtga 29

<210> 9
<211> 28
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 9
agcttcacgt gtgcagatgc catggtgg 28

<210> 10
<211> 23
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 10
gggcggtagg cgtgtacggt ggg 23

<210> 11
<211> 26
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 11
gcaactagaa ggcacagtcg aggctg 26

<210> 12
<211> 27
<212> DNA
<213> Synthetic Sequence

<220>
 <223> Description of the Synthetic Sequence: Primer
 <400> 12
 gtttgacag tgaggtatgt gtcttag 27

<210> 13
 <211> 27
 <212> DNA
 <213> Synthetic Sequence

<220>
 <223> Description of the Synthetic Sequence: Primer
 <400> 13
 ctttccagca ggttggtctc tgttgtc 27

<210> 14
 <211> 30
 <212> DNA
 <213> Synthetic Sequence
 <220>
 <223> Description of the Synthetic Sequence: synthetic Primer
 <400> 14
 tgacggggc acccacactg tgcccatcta 30

<210> 15
 <211> 29
 <212> DNA
 <213> Synthetic Sequence
 <220>
 <223> Description of the Synthetic Sequence: Primer
 <400> 15
 ctagaagcat tgcggtggac gatggagg 29

<210> 16
 <211> 22
 <212> DNA
 <213> Synthetic Sequence
 <220>
 <223> Description of the Synthetic Sequence: Primer
 <400> 16
 aaggtgaagg tcggagtcaa cg 22

<210> 17
<211> 24
<212> DNA
<213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 17
ggcagagatg atgacccttt tggc

24

<210> 18
<211> 26
<212> DNA
<213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 18
tattttgctc cctttctaac ttcttt

26

<210> 19
<211> 30
<212> DNA
<213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 19
tttcactttt catcagcatc atctttcaca

30

<210> 20
<211> 27
<212> DNA
<213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 20
cgtttagactc ctcttcatgt caggcaa

27

<210> 21
<211> 22
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 21
ggtgacacta tagaaggtac gc 22

<210> 22
<211> 28
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 22
caggcctgag atgtttcatg tcacaagg 28

<210> 23
<211> 29
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 23
gcatttcctg cgtttgtatc agcttctct 29

<210> 24
<211> 30
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 24
accagcacca caaccgccac tctattatcc 30

<210> 25
<211> 30
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 25
catatagtga tcttccttgt ccgtctcgtc 30

<210> 26
 <211> 26
 <212> DNA
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<220>
 <223> Description of the Synthetic Sequence: Primer

<400> 26
 gcgcccacatca attgcttcca caagta 26

<210> 27
 <211> 21
 <212> DNA
 <213> Synthetic Sequence

<220>
 <223> Description of the Synthetic Sequence: Primer

<400> 27
 gcagagctcg tttagtgaac c 21

<210> 28
 <211> 30
 <212> DNA
 <213> Synthetic Sequence

<220>
 <223> Description of the Synthetic Sequence: Primer

<400> 28
 ggccagaaat aataaggtcc ccacaagatg 30

<210> 29
 <211> 29
 <212> DNA
 <213> Synthetic Sequence

<220>
 <223> Description of the Synthetic Sequence: Primer

<400> 29
 agctttctgc gtctttcttt ttcttcctg 29

<210> 30
 <211> 26

<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 30
aggtcgccaa gtcgctgtct gctctg 26

<210> 31
<211> 37
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 31
tgggtagttg tgcattcaggt agtgggagcg ctccagc 37

<210> 32
<211> 27
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 32
ctcgaagggt ggtgttctcc tctgtga 27

<210> 33
<211> 22
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 33
gagctcgtcc cttcttcggt cg 22

<210> 34
<211> 40
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 34
cataagagtg cgtgtgtccc caacatgacc gaacgaagaa 40

<210> 35
<211> 47
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 35
tcgtcccttc ttcgttcggg catgttgggg acacacgcac tcttatg 47

<210> 36
<211> 40
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 36
ttcttcgttc ggcatgttg gggacacacg cactcttatg 40

<210> 37
<211> 28
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 37
cagggtgacg gttggggtgg gaggagac 28

<210> 38
<211> 29
<212> DNA
<213> Synthetic Sequence

<220>
<223> Description of the Synthetic Sequence: Primer

<400> 38
gcttcacttc tgtggggatg gaggcctgg 29

<210> 39
 <211> 22
 <212> DNA
 <213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 39
 atgcgaaata agcgggtttt ga

22

<210> 40
 <211> 29
 <212> DNA
 <213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 40
 cgcagaggag tctcgcgtg gtgagtatg

29

<210> 41
 <211> 29
 <212> DNA
 <213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 41
 ggctcaggtg tgggacccca tccttcctg

29

<210> 42
 <211> 29
 <212> DNA
 <213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 42
 gctccggacg acagcccgt cagcggacc

29

<210> 43
 <211> 24
 <212> DNA
 <213> Synthetic Sequence

<220>

<223> Description of the Synthetic Sequence: Primer

<400> 43
gaagaaacct gactgcgccc tgag

24

<210> 44
<211> 9
<212> PRT
<213> Homo sapiens

<400> 44
Met Leu Gln Ile His Leu Pro Gly Arg
1 5

<210> 45
<211> 9
<212> PRT
<213> Homo sapiens

<400> 45
Ile His Leu Pro Gly Arg His Thr Leu
1 5

<210> 46
<211> 9
<212> PRT
<213> Homo sapiens

<400> 46
His Leu Pro Gly Arg His Thr Leu Phe
1 5

<210> 47
<211> 9
<212> PRT
<213> Homo sapiens

<400> 47
Tyr Val Ala Gln Asn Gly Ile Pro Leu
1 5

<210> 48
<211> 9
<212> PRT
<213> Homo sapiens

<400> 48
Leu Arg Ile Lys Asp Trp Pro Ile Leu
1 5

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<210> 49
<211> 9
<212> PRT
<213> Homo sapiens

<400> 49
Ile Leu Val Glu Ala Ile Asp Gly Arg
1 5

<210> 50
<211> 9
<212> PRT
<213> Homo sapiens

<400> 50
Gly Arg Pro Ile Ala Ser Gly Pro Val
1 5

<210> 51
<211> 9
<212> PRT
<213> Homo sapiens

<400> 51
Glu Thr His Asp Leu Ile Val Asp Leu
1 5

<210> 52
<211> 9
<212> PRT
<213> Homo sapiens

<400> 52
Asp Leu Gly Asp His Arg Glu Val Leu
1 5

<210> 53
<211> 9
<212> PRT
<213> Homo sapiens

<400> 53
Gly Asp His Arg Glu Val Leu Ser Phe
1 5

<210> 54
<211> 9
<212> PRT

<213> Homo sapiens

<400> 54

Gln Ser Pro Phe Phe Pro Val Val Leu
1 5

<210> 55

<211> 9

<212> PRT

<213> Homo sapiens

<400> 55

Val Leu Gly Pro Arg Trp Leu Ser Ala
1 5

<210> 56

<211> 9

<212> PRT

<213> Homo sapiens

<400> 56

Trp Leu Ser Ala His Asp Pro Asn Ile
1 5

<210> 57

<211> 9

<212> PRT

<213> Homo sapiens

<400> 57

Arg Ser Ile Val Phe Asp Ser Glu Tyr
1 5

<210> 58

<211> 9

<212> PRT

<213> Homo sapiens

<400> 58

Ile Val Phe Asp Ser Glu Tyr Cys Arg
1 5

<210> 59

<211> 9

<212> PRT

<213> Homo sapiens

<400> 59

Pro Pro Pro Ala Pro Gln Pro Pro Leu
1 5

<210> 60
 <211> 9
 <212> PRT
 <213> Homo sapiens

 <400> 60
 Pro Leu Tyr Tyr Pro Val Asp Gly Tyr
 1 5

<210> 61
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 61
 Arg Val Tyr Gln Pro Val Arg Tyr Tyr
 1 5

<210> 62
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 62
 Tyr Gln Pro Val Arg Tyr Tyr Tyr Val
 1 5

<210> 63
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 63
 Val Arg Tyr Tyr Tyr Val Gln Asn Val
 1 5

<210> 64
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 64
 Tyr Val Gln Asn Val Tyr Thr Pro Val
 1 5

<210> 65
 <211> 9
 <212> PRT

<213> Homo sapiens

<400> 65

Glu His Val Tyr Pro Asp His Arg Leu
1 5

<210> 66

<211> 9

<212> PRT

<213> Homo sapiens

<400> 66

Leu Val Asp Pro His Ile Glu Met Ile
1 5

<210> 67

<211> 9

<212> PRT

<213> Homo sapiens

<400> 67

Glu Met Ile Pro Gly Ala His Ser Ile
1 5

<210> 68

<211> 9

<212> PRT

<213> Homo sapiens

<400> 68

His Ser Ile Pro Ser Gly His Val Tyr
1 5

<210> 69

<211> 9

<212> PRT

<213> Homo sapiens

<400> 69

Ile Pro Ser Gly His Val Tyr Ser Leu
1 5

<210> 70

<211> 9

<212> PRT

<213> Homo sapiens

<400> 70

Ser Leu Ser Glu Pro Glu Met Ala Ala
1 5

09631853-062901

<210> 71
<211> 9
<212> PRT
<213> Homo sapiens

<400> 71
Leu Ser Glu Pro Glu Met Ala Ala Leu
1 5

<210> 72
<211> 9
<212> PRT
<213> Homo sapiens

<400> 72
Pro Glu Met Ala Ala Leu Arg Asp Phe
1 5

<210> 73
<211> 9
<212> PRT
<213> Homo sapiens

<400> 73
Glu Met Ala Ala Leu Arg Asp Phe Val
1 5

<210> 74
<211> 9
<212> PRT
<213> Homo sapiens

<400> 74
Ala Leu Arg Asp Phe Val Ala Arg Asn
1 5

<210> 75
<211> 9
<212> PRT
<213> Homo sapiens

<400> 75
Val Ala Arg Asn Val Lys Asp Gly Leu
1 5

<210> 76
<211> 9
<212> PRT

<213> Homo sapiens

<400> 76

Thr Ile Ala Pro Asn Gly Ala Gln Val
1 5

<210> 77

<211> 9

<212> PRT

<213> Homo sapiens

<400> 77

Ile Ala Pro Asn Gly Ala Gln Val Leu
1 5

<210> 78

<211> 9

<212> PRT

<213> Homo sapiens

<400> 78

Val Leu Gln Val Lys Arg Gly Trp Lys
1 5

<210> 79

<211> 9

<212> PRT

<213> Homo sapiens

<400> 79

Leu Gln Val Lys Arg Gly Trp Lys Leu
1 5

<210> 80

<211> 9

<212> PRT

<213> Homo sapiens

<400> 80

Tyr Pro Arg Leu Ser Ile Pro Asn Leu
1 5

<210> 81

<211> 9

<212> PRT

<213> Homo sapiens

<400> 81

Glu Asp Gln Ala His Leu Ala Thr Tyr
1 5

<210> 82
<211> 9
<212> PRT
<213> Homo sapiens

<400> 82
His Leu Ala Thr Tyr Thr Glu Phe Val
1 5

<210> 83
<211> 9
<212> PRT
<213> Homo sapiens

<400> 83
Gly Arg Asp Gly Gln Gly Arg Ser Leu
1 5

<210> 84
<211> 9
<212> PRT
<213> Homo sapiens

<400> 84
Arg Asp Gly Gln Gly Arg Ser Leu Tyr
1 5

<210> 85
<211> 9
<212> PRT
<213> Homo sapiens

<400> 85
Asp Gly Gln Gly Arg Ser Leu Tyr Val
1 5

<210> 86
<211> 9
<212> PRT
<213> Homo sapiens

<400> 86
Ser Leu Tyr Val Pro Val Met Ile Thr
1 5

<210> 87
<211> 9
<212> PRT
<213> Homo sapiens

09631863-062901

<400> 87
Ile Thr Trp Asn Pro His Trp Tyr Arg
1 5

<210> 88
<211> 9
<212> PRT
<213> Homo sapiens

<400> 88
Ser Pro Pro Thr Pro Thr Val Thr Leu
1 5

<210> 89
<211> 9
<212> PRT
<213> Homo sapiens

<400> 89
Leu Ser Glu Glu Ile Asn Asn Leu Arg
1 5

<210> 90
<211> 9
<212> PRT
<213> Homo sapiens

<400> 90
Lys Leu Thr Glu Glu Asn Thr Thr Leu
1 5

<210> 91
<211> 9
<212> PRT
<213> Homo sapiens

<400> 91
Leu Thr Glu Glu Asn Thr Thr Leu Arg
1 5

<210> 92
<211> 9
<212> PRT
<213> Homo sapiens

<400> 92
Ile Glu Leu Arg Gly Ala Ala Ala Ala
1 5

09631863-062901

<210> 93
<211> 9
<212> PRT
<213> Homo sapiens

<400> 93
Phe Met Ala Gln Cys Gln Ile Phe Met
1 5

<210> 94
<211> 9
<212> PRT
<213> Homo sapiens

<400> 94
Ser Met Met Thr Gly Arg Ala Ala Arg
1 5

<210> 95
<211> 9
<212> PRT
<213> Homo sapiens

<400> 95
Ala Ala Arg Trp Ala Ser Ala Lys Leu
1 5

<210> 96
<211> 9
<212> PRT
<213> Homo sapiens

<400> 96
Ala Lys Leu Glu Arg Ser His Tyr Leu
1 5

<210> 97
<211> 9
<212> PRT
<213> Homo sapiens

<400> 97
Gln Gly Met Gly Ser Val Ile Asp Tyr
1 5

<210> 98
<211> 9

09631863 062901

<212> PRT
<213> Homo sapiens

<400> 98
Asn Glu Pro Ala Leu Ile Asp Gln Tyr
1 5

<210> 99
<211> 9
<212> PRT
<213> Homo sapiens

<400> 99
Arg Arg Leu Ala Arg Ala Ala Ala Ala
1 5

<210> 100
<211> 9
<212> PRT
<213> Homo sapiens

<400> 100
Lys Pro Arg Ser Pro Pro Arg Ala Leu
1 5

<210> 101
<211> 9
<212> PRT
<213> Homo sapiens

<400> 101
Arg Met Arg Leu Thr Gln Glu Glu Lys
1 5

<210> 102
<211> 9
<212> PRT
<213> Homo sapiens

<400> 102
Pro Thr Glu Pro Val Gly Gly Ala Arg
1 5